

PLASMA-LYTE R - sodium chloride, potassium chloride, magnesium chloride, sodium acetate trihydrate, sodium lactate and calcium chloride injection, solution

Baxter Healthcare Corporation

DESCRIPTION

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) is a sterile, nonpyrogenic isotonic solution in a single dose container for intravenous administration. Each 100 mL contains 640 mg of Sodium Acetate Trihydrate, USP ($C_2H_3NaO_2 \cdot 3H_2O$); 496 mg of Sodium Chloride, USP (NaCl); 89.6 mg of Sodium Lactate ($C_3H_5NaO_3$); 74.6 mg of Potassium Chloride, USP (KCl); 36.8 mg of Calcium Chloride, USP ($CaCl_2 \cdot 2H_2O$); and 30.5 mg of Magnesium Chloride, USP ($MgCl_2 \cdot 6H_2O$). It contains no antimicrobial agents. The pH is adjusted with hydrochloric acid. The pH is 5.5 (4.0 to 8.0).

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) administered intravenously has value as a source of water, electrolytes, and calories. One liter has an ionic concentration of 140 mEq sodium, 10 mEq potassium, 5 mEq calcium, 3 mEq magnesium, 103 mEq chloride, 47 mEq acetate, and 8 mEq lactate. The osmolarity is 312 mOsmol/L (calc). Normal physiologic osmolarity range is approximately 280 to 310 mOsmol/L. Administration of substantially hypertonic solutions may cause vein damage. The caloric content is 11 kcal/L.

The VIAFLEX plastic container is fabricated from a specially formulated polyvinyl chloride (PL 146 Plastic). The amount of water that can permeate from inside the container into the overwrap is insufficient to affect the solution significantly. Solutions in contact with the plastic container can leach out certain of its chemical components in very small amounts within the expiration period, e.g., di-2-ethylhexyl phthalate (DEHP), up to 5 parts per million. However, the safety of the plastic has been confirmed in tests in animals according to USP biological tests for plastic containers as well as by tissue culture toxicity studies.

CLINICAL PHARMACOLOGY

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) has value as a source of water and electrolytes. It is capable of inducing diuresis depending on the clinical condition of the patient.

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) produces a metabolic alkalizing effect. Acetate and lactate ions are metabolized ultimately to carbon dioxide and water, which requires the consumption of hydrogen cations.

INDICATIONS AND USAGE

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) is indicated as a source of water and electrolytes or as an alkalizing agent.

CONTRAINDICATIONS

None known

WARNINGS

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should be used with great care, if at all, in patients with congestive heart failure, severe renal insufficiency and in clinical states in which there exists edema with sodium retention.

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should be used with great care, if at all, in patients with hyperkalemia, severe renal failure and in conditions in which potassium retention is present.

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should be used with great care in patients with metabolic or respiratory alkalosis. The administration of lactate or acetate ions should be done with great care in those conditions in which there is an increased level or an impaired utilization of these ions, such as severe hepatic insufficiency. PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should not be administered simultaneously with blood through the same administration set because of the likelihood of coagulation.

The intravenous administration of PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) can cause fluid and/or solute overloading resulting in dilution of serum electrolyte concentrations, overhydration, congested states or pulmonary edema. The risk of dilutional states is inversely proportional to the electrolyte concentrations of the injection. The risk of solute overload causing congested states with peripheral and pulmonary edema is directly proportional to the electrolyte concentrations of the injection.

In patients with diminished renal function, administration of PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) may result in sodium or potassium retention. PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) is not for use in the treatment of lactic acidosis.

PRECAUTIONS

Clinical evaluation and periodic laboratory determinations are necessary to monitor changes in fluid balance, electrolyte concentrations and acid base balance during prolonged parenteral therapy or whenever the condition of the patient warrants such evaluation.

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should be used with caution. Excess administration may result in metabolic alkalosis.

Caution must be exercised in the administration of PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) to patients receiving corticosteroids or corticotropin.

Pregnancy

Teratogenic Effects

Pregnancy Category C

Animal reproduction studies have not been conducted with PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP). It is also not known whether PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) should be given to a pregnant woman only if clearly needed.

Pediatric Use

Safety and effectiveness of PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) in pediatric patients have not been established by adequate and well controlled trials, however, the use of electrolyte solutions in the pediatric population is referenced in the medical literature. The warnings, precautions and adverse reactions identified in the label copy should be observed in the pediatric population.

Geriatric Use

Clinical studies of PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or drug therapy.

Do not administer unless solution is clear and seal is intact.

ADVERSE REACTIONS

Reactions which may occur because of the solution or the technique of administration include febrile response, infection at the site of injection, venous thrombosis or phlebitis extending from the site of injection, extravasation and hypervolemia.

If an adverse reaction does occur, discontinue the infusion, evaluate the patient, institute appropriate therapeutic countermeasures and save the remainder of the fluid for examination if deemed necessary.

DOSAGE AND ADMINISTRATION

As directed by a physician. Dosage is dependent upon the age, weight and clinical condition of the patient as well as laboratory determinations.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit.

All injections in VIAFLEX plastic containers are intended for intravenous administration using sterile equipment.

Additives may be incompatible. Complete information is not available. Those additives known to be incompatible should not be used. Consult with pharmacist, if available. If, in the informed judgment of the physician, it is deemed advisable to introduce additives, use aseptic technique. Mix thoroughly when additives have been introduced. Do not store solutions containing additives.

HOW SUPPLIED

PLASMA-LYTE R Injection (Multiple Electrolytes Injection, Type 2, USP) in VIAFLEX plastic containers is available as shown below:

Code	Size (mL)	NDC
2B2504	1000	NDC 0338-0177-04

Exposure of pharmaceutical products to heat should be minimized. Avoid excessive heat. It is recommended the product be stored at room temperature (25°C); brief exposure up to 40°C does not adversely affect the product.

DIRECTIONS FOR USE OF VIAFLEX PLASTIC CONTAINER

Warning: Do not use plastic containers in series connections. Such use could result in air embolism due to residual air being drawn from the primary container before administration of the fluid from the secondary container is completed.

To Open

Tear overwrap down side at slit and remove solution container. Some opacity of the plastic due to moisture absorption during the sterilization process may be observed. This is normal and does not affect the solution quality or safety. The opacity will diminish gradually. Check for minute leaks by squeezing inner bag firmly. If leaks are found, discard solution as sterility may be impaired. If supplemental medication is desired, follow directions below.

Preparation for Administration

1. Suspend container from eyelet support.
2. Remove plastic protector from outlet port at bottom of container.
3. Attach administration set. Refer to complete directions accompanying set.

To Add Medication

Warning: Additives may be incompatible.

To add medication before solution administration

1. Prepare medication site.
2. Using syringe with 19 to 22 gauge needle, puncture resealable medication port and inject.
3. Mix solution and medication thoroughly. For high density medication such as potassium chloride, squeeze ports while ports are upright and mix thoroughly.

To add medication during solution administration

1. Close clamp on the set.
2. Prepare medication site.
3. Using syringe with 19 to 22 gauge needle, puncture resealable medication port and inject.
4. Remove container from IV pole and/or turn to an upright position.
5. Evacuate both ports by squeezing them while container is in the upright position.
6. Mix solution and medication thoroughly.
7. Return container to in use position and continue administration.

Baxter Healthcare Corporation

Deerfield, IL 60015 USA

Printed in USA

©Copyright 1982, 1983, 1984, 1989, 1993, Baxter Healthcare Corporation.

All rights reserved.

7-19-29-403

BAXTER, PLASMA-LYTE, VIAFLEX, AND PL 146 ARE TRADEMARKS OF BAXTER INTERNATIONAL INC.